Pillsbury Milling Complex, South "A" Mill 335 Main Street Southeast Minneapolis Hennepin County Minnesota HABS No. MN-29-5-G

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Rocky Mountain Regional Office
Department of the Interior
P.O. Box 25287
Denver, Colorado 80225

HISTORIC AMERICAN BUILDINGS SURVEY

PILLSBURY MILLING COMPLEX,

HABS No. MN-29-5G

SOUTH "A" MILL

335 Main Street Southeast, Minneapolis, Hennepin

County, Minnesota.

USGS Minneapolis South Quadrangle, Universal Transverse Mercator Coordinates: Zone 15;

480100:4981060; 480320:4980940; 480260:4980800;

480040:4980940

Present Owner:

Location:

The Pillsbury Company

Pillsbury Center

200 South Sixth Street

Minneapolis, Minnesota 55402

Present Occupant:

The Pillsbury Company

Present Use:

The milling of grain into flours. The packing of

flour, and storage of the packaged flour for

shipment.

Significance:

The Pillsbury Milling Complex is a vital part of Minneapolis History. The Pillsbury Mills were founded on the waterfalls of St. Anthony, Minnesota in 1869 (Pillsbury Mills, Inc. Historial Sketch 8/15/49). By 1905, the City of Minneapolis was the largest producer of flour in the United States. (St. Anthony Falls rediscovered, Mpls. Riverfront Development, p. 24) The Pillsbury South "A" Mill is an addition to the more famous Pillsbury "A" Mill built in the early 1880's. The "A" Mill was the largest single flour mill in the world, and the only flour mill in Minneapolis to be designed by an architect. (Guide to Industrial Archeology of the Twin Cities, p. 40) The Pillsbury Milling Complex is an architectural symbol of an industry

which has brought Minneapolis international

recognition.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: The original building permit for the South "A" Mill obtained from the Minneapolis Department of Inspections, lists the construction date as August 7, 1916. The construction of the South "A" Mill took approximately one year to complete, as Pillsbury Best, a company history, cites the years 1916 and 1917 as the construction dates for the South "A" Mill.

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- 2. Architect: Barnett and Record Company, Minneapolis, Minnesota.
- 3. Original and subsequent owners: Verified title with the Hennepin County Property Tax Office and the Hennepin County Abstract Index Office. Records at both offices show the Pillsbury Company to be the original and subsequent owner of the property on which the South "A" Mill was built. The following is an incomplete chain of title to the land on which the struture stands, beginning with the date of erection, 1916 ending with the year 1930. The structure was built at a cost of \$200,000. The title search shows no mortgages filed against the property preceding and during the years of construction indicating the cost was financed by the Pillsbury Company. Reference is to the Office of Abstract Records of Hennepin County, Minnesota.
 - Filed: 1919 Action book 168, page 257: Unable to locate further information on this document due to incorrect filing of microfilm at the Abstract Office.
 - Filed: 1920 Charter book 201, page 36: Unable to locate further information on this document due to incorrect filing of microfilm at the Abstract Office.
 - Filed: 1923 Deed book 967, page 174, Document #11B9408, Dated: 12/24/1923. Pillsbury-Washburn Flour Mills Co. a corporation under the laws of the State of New Jersey to Pillsbury Flour Mills Co. a corporation under the laws of the State of Minnesota.
 - Filed: 1925 Quit Claim Deed book 1095, page 133, Dated: 12/9/1925. Minneapolis Eastern Railway and Great Northern Railway to Pillsbury Flour Mills Co. a corporation under the laws of the State of Minnesota.
- 4. Builder, contractor, suppliers: The original building permit #13364 lists the contractors as Barnett and Record Company of Minneapolis, Minnesota. At the time of construction (1916), the Barnett and Record Company was located at 700 Flour Exchange Building. The president of the company was F.R. McQueen.

The Barnett and Record Company originated in 1885 when Lewis C. Barnett and James L. Record, then both independent builders joined forces. The Minneapolis City Directory of 1883 lists L.C. Barnett as an "elevator builder".

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The Minneapolis City Oirector of 1900, contains a large advertisement from the Barnett and Record Company citing their construction specialization in grain elevators, flour mills, and docks. In the year 1900, F.R. McQueen was the superintendent of contractors and engineers, under the direction of James L. Record, who was the treasurer and general manager. Lewis Barnett was the president of the company. The company dissolved sometime prior to World War I.

- 5. Original plans and construction: The original plans are on file at the Pillsbury Company, Pillsbury Center, 200 South Sixth Street, Minneapolis, Minnesota.
- 6. Alterations and Additions: The addition of the metal awning attached to the lower front facade occurred in 1918. It was later replaced with another corrugated metal awning. Shortly after the awning replacement, the lower window openings were changed to overhead door openings to allow truck trailers to drive into the warehouse for loading.

The exterior remained unchanged until sometime after 1940. At undetermined dates, all the original glass and metal frame windows were changed to glass glock. All original 11 front dock doors and flanking sidelights were bricked in. Three metal overhead loading doors and three metal passage doors were added to the structure.

In the 1960's a new boiler was installed in the angled position of the west end as it attached to the original 1881 Pillsbury "A" Mill. When the hoiler was installed, the front lower facade, which was previously open, was closed in with concrete block.

The last alteration occurred in the early 1980's when a small closed in corrugated metal leanto structure with a compression dumpster was added to the east side of the building closing off one drive-in door.

B. Historical Context:

The Pillsbury Mills were founded in 1869, when Charles A. Pillsbury, purchased a one third interest in the Minneapolis Mill with a 150 a day barrel capacity. The mills were built by the waterfalls of St. Anthony and prospered from the waterpower of the St. Anthony Falls and the proximity to the Minnesota and Oakota's wheatlands. In 1872 the Pillsburys had sole ownership of the mill under their family partnership named, C.A. Pillsbury & Company. The partnership was formed by Charles A. Pillsbury, his father, George A. Pillsbury, and his uncle, John S. Pillsbury (History of Minnesota).

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The Pillsbury's were innovators in the milling industry, implementing inventions such as the middlings purifier and roller mill processes which could manufacture superlative flour from the spring wheat in the Northwest (History of Minnesota). By 1877 the Pillsbury Mills were producing 2000 barrels daily (Pillsbury Mills Inc. historical sketch). Milling history was also made with the construction of the Pillsbury "A" Mill in the early 1880's. The Pillsbury "A" Mill was significant to the flour milling industry as it was the largest and most modern flour mill in the world, containing technically advanced mechanical and milling equipment.

The South "A" Mill, as its name implies was an addition to the Pillsbury "A" Mill and was constructed in 1916. The South "A" Mill was initially constructed to enlarge the operations in the Pillsbury "A" Mill. According to Pillsbury Best, a company history, the construction of the South "A" Mill allowed the removal of cleaning machinery from the "A" mill to the South "A". With the added space in the "A" mill the production of flour was increased by 1000 barrels daily.

The original construction of the South "A" Mill consisted of a 3000 barrel capacity mill, a nine story cleaning house where the wheat was cleaning and prepared for milling, and a three story flour warehouse where the flour was packed and stored. The original use and the current use of the building has remained unchanged. Currently, the South "A" Mill is the only mill in the St. Anthony Falls district remaining fully operational. (Guide to the Industrial Archeology of the Twin Cities).

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

- 1. Architectural Character: Built as part of an industrial grain milling complex, the South "A" Mill is an example of early twentieth century warehouse construction. The structure is composed of two sections: a long narrow three story rectangular warehouse building that sits in front of a vertical nine story mill building. Although the structure was built as a grain mill, it has a particular interest in the typical nine story vertical rise and a load bearing warehouse structure.
- 2. Condition of Fabric: The structure is well maintained and all elements are in good condition.

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B. Description of Exterior:

1. Overall Dimensions: The South "A" Mill is located in the center of a two block area on Main Street S.E. The overall dimensions are 233' wide x 150' deep. The three story warehouse building joins to the original 1881 Pillsbury "A" Mill on the west side. It is twelve bays wide by two bays deep, with structural vertical members as pilasters evident on the facade separating the bays. Each bay is approximately sixteen and one half feet wide by four bays deep, with the same detailing as the lower structure. There is a basement level below the nine story section. The finished first floor is approximately four feet above grade to facilitate loading on to train cars.

The small section (approximately 30' wide) on the west end was originally opened through the facade on the first floor, where the rope drive came in from the water wheel pulley to power the facility. Above this is a closed in bridge between the Pillbury "A" Mill and the South "A" on the second and third floors. This section angles back to meet the Pillsbury "A" Mill.

- 2. Foundations: Poured reinforced concrete, dimensions undetermined.
- 3. Wall Construction: The exterior walls of the three story warehouse are clad in a buff brick of English bond while the nine story mill building is clad with a medium grey brick. The use of the two different types of brick cannot be documented at this time. Each structural bay is one window wide with the window opening set a full width between two vertical pilaster structural members.

The top ten courses of brick on each building, project out flush with the pilaster face, the next four courses create a stepped-in horizontal band across each bay (a corbel detailing) and rests above the last window forming the window lintel. It is the only architectural detailing original to the building that still remains.

4. Structural System, Framing: Both the South "A" Mill and the warehouse building are reinforced concrete column and beam construction. The dimensions of the columns are 2'-6" x 2'-6" on the first and second floors, and progress smaller in dimension through the ninth floor. All of the columns are 16' on center.

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- 5. Porches, Stoops, Balconies, Bulkheads: A steel loading platform, not original to the three story building, was constructed on the front facade on top of the concrete footings. A corrugated metal awning runs the full width of the warehouse above the loading doors. During the 1960's, the angled section on the west side below the second and third story was filled in with concrete block. In the 1980's, a metal corrugated lean-to structure was added to the east side providing a closed in dock area. A compression dumpster sits next to this dock. Trucks are still allowed through the opening.
- 6. Chimneys: Appear to be metal stack.

7. Openings:

- a. Doorways and doors: Originally, each of the twelve north facing bays, with one exception, had a double loading door on to Main Street. The material of the doors is undetermined. The doors were flanked by a one over three light window with a metal sash on each side of the upper half of the door opening. These doors opened inward. There was a passage door in the middle bay of an undetermined material, containing no side lights.
- b. Windows: Each bay on the north and east sides have a single window opening on all floors starting on the second floor. These window openings are as wide as the bay between each pilaster. The typical original window on the three story warehouse was a nine over three light in a metal sash with an eight inch concrete sill.

Photographs indicate that the upper two sections of these windows were operable. The windows of the nine story building were twelve over five light in a metal sash with the same concrete sill.

All of the window openings have been replaced with glass block. The size of the original openings remain unchanged, with the exception of two lower windows on the east side of the three story warehouse. These two windows were later made into door openings to allow the truck trailers to drive into the warehouse for loading.

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8. Roof:

a. Shape, Covering: The roof line of the nine story mill building has a slightly gabled pitch. The three story warehouse has a shed roof with a slight downward pitch toward Main Street. The roof line does not contain any detailing.

The roof construction is a flat metal deck with asphalt roofing.

- b. Cornice, Eaves, Fascia: The fascia is a flat metal piece with no decorative details.
- c. Dormers, Cupolas, Towers: None.

C. Description of Interior:

- 1. Floor Plans: Not accessible.
- 2. Stairways: Personal investigation indicates that there were and are no stairwells within the nine story mill. Vertical access is by a mechanical man lift drive, originally manufactured by Humphrey and replaced in 1951 with an Allis, in a circular shaft through the building. There is also one box elevator.
- 3. Flooring: All floors, with the exception of the fifth floor, are poured concrete with maple wood flooring. The fifth floor of the mill has a glazed white mosaic tile finished floor.

D. Site:

1. General Setting and Orientation: The structure sits on the center of a two block plot facing southwest onto Main Street S.E. The two block plot has approximately 775' frontage on Main Street S.E. and 350' side frontage on 3rd Avenue S.E. and 5th Avenue S.E.

Main Street S.E. overlooks a Mississippi River bluff directly above the Falls of Saint Anthony. A limestone arch bridge, the oldest railroad bridge in the Northwest built in 1882-83 by James J. Hill is also located near and visible from the site.

2. Historic landscape design: The original site faced an undeveloped river bluff with the Minneapolis Eastern Railroad switching track running directly in front of the mill building. Main Street was eventually paved in cobblestone. There is a narrow strip of flat land on the south side of Main Street.

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Presently, there is a nondecorative wrought iron and timber post fence with a bituminous walk in front. Natural outcroppings of vegetation have been left undisturbed. Vegetation included mature elm trees, lilacs and other native shrubs.

3. Outbuildings: The 1881 Pillsbury "A" Mill building is attached to the west side of the South "A" Mill with the 1910 Tile Elevator attached to the northeast side. Directly to the east is a parking lot and the remaining southeast corner is occupied by a metal panel warehouse built in 1985.

PART III. SOURCES OF INFORMATION

- A. Driginal Architectural Drawings: The drawings for the original 1916-17 South "A" Mill are available through The Pillsbury Company, Engineering Department, 200 South Sixth Street, Minneapolis, Minnesota.
- B. Early Views: Photographs are available from the collection of the Minnesota Historical Society, Audio-Visual Library, 690 Cedar Street, St. Paul, Minnesota.

An 1879 engraving in ink by Albert Ruger (negative #47586, MN Historical Society) shows a view of the construction of the Pillsbury "A" Mill. A second engraving, dated in 1886 by A. Hageboeck (negative #45668, MN Historical Society) illustrates the east front of the "A" Mill Complex with the stone arch bridge.

- C. Interviews: Personal interview with Richard Ferrell, Engineer, Pillsbury Co. on April 15, 1987. Ferrell was the South "A" Mill plant manager prior to becoming plant engineer. He has a personal collection of historical information regarding the Pillsbury Milling Complex and provided a chronological list of various alternations made to the complex.
- D. Bibliography:
 - 1. Primary and unpublished sources:
 - City of Minneapolis. <u>Aerial Photograph</u>
 Office of Property Description, Hennepin County Government
 Center, 1978, Mark Hurd.
 - City of Minneapolis. <u>Building Permit</u>
 Office of Building Inspections, Hennepin County Government
 Center, #13364, 1916.

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- City of Minneapolis. Plat Map
 Office of Building Inspections, Hennepin County Government
 Center, 1891 of St. Anthony Falls.
- Hennepin County. Abstract Index Listing
 Office of Abstract Records, Hennpin County Government
 Center.
- 2. Secondary and published sources:
 - Christianson, Theodore. <u>History of Minnesota</u>, Volume IV, Chicago American Historical Society, Inc. 1935. (Minnesota Historical Society).
 - Guide to the Industrial Archeology of the Twin Cities, edited by Nicholas Westbrook, St. Paul, Mpls. Minnesota Historical Society. p. 19. (Mpls History Collection).
 - Hopkins. Hopkins Real Estate Maps, 1885, 1903, 1914. (Minnesota Historical Society):
 - Kane, Lucile M. The Waterfall that Built a City, St. Paul, published by the Minnesota Historical Society, 1966 p. 21, 22. (Mpls History Collection).
 - Minneapolis City Oirectories, 18B3 to 1916, Polk and Company, Chicago, Illinois. (Minneapolis Public Library).
 - Powell, William J. <u>Pillsbury Best, A Company History from 1869</u>, Minneapolis, The Pillsbury Company, 1985. (Mpls History Collection).
 - Saint Anthony Falls Rediscovered. James Berman, ed.

 Minneapolis Riverfront Development Coordination Board, City of Minneapolis, 1980, pp. 29, 37-42. (Mpls History Collection).
 - "200 Years at Saint Anthony Falls", <u>Happenings</u>, The First Banks. (Mpls History Collection).
 - Sanborn. Sanborn Insurance Maps of Saint Paul, Minnesota, 1885-1890, Volume 2, Sanborn Map Co., Broadway, New York, p. 58. (Minnesota Historical Society).
 - Sanborn. Sanborn Insurance Maps of Saint Paul, Minnesota, 1912, Volume B, Sanborn Map Co., Broadway, New York, pp. 957, 959. (Minnesota Historical Society).

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Sanborn. Sanborn Insurance Maps of Saint Paul, Minnesota, 1912-1941, Volume 8, Sanborn Map Co., Broadway, New York, pp. 957,959. (Minnesota Historical Society).

Prepared by: Patricia Adamczak, Jill Hunt and Michelle Kelly University of Minnesota April 1987

PART IV. PROJECT INFORMATION

This project was prepared as a class project for Architecture 5143, Historic Building Research and Documentation, a class offered in the School of Architecture and Landscape Architecture at the University of Minnesota. The class project was prepared under the direction of Professor Foster W. Dunwiddie in cooperation with the State Historic Preservation Office of the Minnesota Historical Society, Saint Paul, Minnesota. Historical data was compiled by Patricia Adamczak, Jill Hunt, and Michelle Kelly in April 1987.